Statement of Rep. Henry A. Waxman
Ranking Member, Committee on Energy and Commerce
Hearing on "Nanotechnology: Understanding How Small Solutions Drive Big Innovation"
Subcommittee on Commerce, Manufacturing, and Trade
July 29, 2014

Today's hearing is a valuable one. We will learn how scientists and engineers are making significant advances by working with nanoparticles.

Nanoparticles are extremely small. One nanometer is one billionth of a meter. A single hair is roughly 75 to 100 thousand nanometers wide.

Nanotechnology can be used to reduce the effect of oil spills on the environment, improve solar panel output, and help detect early-stage Alzheimer's disease. Researchers are working on even more applications, including groundbreaking uses in cancer treatment and the fight against climate change.

At the federal level, the National Nanotechnology Initiative, or NNI, provides participating agencies with a coordinated framework for supporting nanotechnology research, development, and manufacturing. I applaud President Obama and the Presidential Council of Advisors on Science and Technology, or PCAST, for their ongoing support of NNI and their broader efforts to bolster this field.

Thanks in part to their efforts, the United States leads the world in nanotechnology investment and research. Important research occurs throughout the country, including at the California NanoSystems Institute, which I am proud to say has one of its two locations within the district I represent, at UCLA.

But our lead in this technology is being challenged. Nanotechnology is flourishing not just here, but around the globe. Nations have devoted significant effort – and public funds – in order to become the most attractive place to research, develop, commercialize, and manufacture nanotechnology products.

One problem is that in the United States, the NNI has not been reauthorized since 2003, when Congress first gave the initiative a statutory foundation and appropriated funds for its work. In addition, public funding for nanotechnology research has been significantly cut over the last few years, with total federal R&D funding for the field dropping nearly 20 percent from 2010 to 2014. This is a mistake.

We in Congress should demonstrate our support for nanotechnology by increasing scientific research funding in next year's budget. We should enhance the educational opportunities available to students and workers to ensure they have the science, technology, engineering, and mathematics knowledge necessary for jobs in nanotechnology. And we should play a more active role in the NNI. The program should be reauthorized, and in doing so, we should provide an updated, cohesive vision for how the U.S. can stay competitive on a global scale.

I am pleased that the Subcommittee will have the opportunity today to learn more about nanotechnology from those who know it best. While the main topic of this hearing is innovation, I encourage members and panelists to remember, in addition, that advances through nanotechnology are made possible by altering particles at a very basic level. As nanotechnology becomes more prolific, scientists like those on this panel must come to understand exactly what the environmental, health, and safety implications are. And members of this Committee must work with agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Consumer Product Safety Commission, to ensure that human health and safety and the environment are protected.

Thank you.